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REMARKS

This is intended as a full and complete response to the Office Action dated April 23, 2003. Please reconsider the claims pending in the application for reasons discussed below.

CLAIM REJECTIONS

A. 35 U.S.C. §102(b) Claims 11-12, 14-15, 38, 45-48 and 51  
*Masuda et al.*

1. Claims 11-12 and 14-15

Claims 11-12 and 14-15 stand rejected under 35 U.S.C. §102(b) as being unpatentable over United States Patent No. 6,171,438 issued January 9, 2001 to *Masuda et al.* (hereinafter referred to as "*Masuda*"). In response, the Applicants have amended independent claim 11, from which claims 12 and 14-15 depend, to more clearly recite aspects of the invention.

*Masuda* does not teach, show or suggest all of the limitations of independent claim 11. *Masuda* teaches a plasma processing chamber having a hollow jacket held adjacent a sidewall for controlling the temperature of the sidewall's inner surface so that polymerized material is drawn onto the jacket's surface to form a film. The jacket is coupled to a pipe or line that extends from outside of the chamber and through the sidewall to supply a heat-exchanging medium into a hollow space in the jacket. The hollow space is completely surrounded and bounded by the jacket. *Masuda* does not teach, show or suggest a chamber liner having a base substantially covering the bottom of the chamber body, the base having a substantially annular passage formed therein, and fluidly isolated from the chamber volume, the base having an inlet and an outlet adapted to circulate a fluid through the passage, as recited by independent claim 11 as amended.

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Thus, independent claim 11, and claims 12 and 14-15 that depend therefrom, are patentable over *Masuda*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

**B. 35 U.S.C. §102(b)**

**Claims 38, 47-48 and 51**

***Shinji***

**1. Claim 38**

Claim 38 stands rejected under 35 U.S.C. §102(b) as being unpatentable over Japanese Patent No. 9,275,092 published October 21, 1997 to *Shinji* (hereinafter referred to as "*Shinji*"). In response, the Applicants have amended claim 38 to more clearly recite aspects of the invention.

*Shinji* does not teach, show or suggest all of the limitations of independent claim 38. *Shinji* teaches a plasma processing chamber having an annular space between a chamber sidewall and a protective wall member positioned inwardly thereof. A cooling gas is introduced into the space between the sidewall and the protective wall member through a supply pipe, to control the temperature of the protective wall member surface. *Shinji* does not teach, show or suggest a liner having an outer cylindrical wall configured to line the sidewalls of a chamber, an inner cylindrical wall configured to line a substrate support disposed in the process volume of the chamber, a bottom coupled between the outer and inner cylindrical walls, and a passage at least partially formed in the liner and isolated from the process volume, the passage being partially bounded by one of the sidewalls or a bottom of the chamber, as recited by independent claim 38 as amended.

Thus, independent claim 38 is patentable over *Shinji*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

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**2. Claims 47-48**

Claims 47-48 stand rejected under 35 U.S.C. §102(b) as being unpatentable over *Shinji*. In response, the Applicants have amended independent claim 47 to more clearly recite aspects of the invention.

*Shinji* does not teach, show or suggest all of the limitations of independent claim 47, from which claim 48 depends. *Shinji* has been discussed above. *Shinji* does not teach, show or suggest a chamber liner having at least a first portion having a base substantially covering a bottom of a chamber body and an outer wall disposed proximate a wall of the chamber body, the chamber liner having a passage fluidly isolated from the chamber volume at least partially formed in the chamber liner, as recited by independent claim 47 as amended.

Thus, independent claim 47, and claim 48 that depends therefrom, are patentable over *Shinji*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

**3. Claim 51**

Claim 51 stands rejected under 35 U.S.C. §102(b) as being unpatentable over *Shinji*. In response, the Applicants have amended claim 51 to more clearly recite aspects of the invention.

*Shinji* has been discussed above. *Shinji* does not teach, show or suggest a chamber liner disposed against a vertical portion of a substrate support, the chamber liner having a passage at least partially formed in the chamber liner, as recited by independent claim 51 as amended.

Thus, claim 51 is patentable over *Shinji*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

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C. 35 U.S.C. §103(a)

Claims 13 and 39-43

*Masuda*

1. Claim 13

Claim 13 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Masuda*. In response, the Applicants have amended independent claim 11, from which claim 13 depends, to more clearly recite aspects of the invention.

The burden for establishing a prima facie case of obviousness falls on the Examiner. See, MPEP §2142. A basic requirement of establishing a prima facie case of obviousness is that the combination of prior art references must teach or suggest all the claim limitations and that there must be a motivation to combine the references. See, MPEP §2143.

*Masuda* has been discussed above. *Masuda* does not teach, show or suggest all of the limitations of independent claim 11. Specifically, *Masuda* does not teach, show or suggest a chamber liner having a base substantially covering the bottom of the chamber body, the base having a substantially annular passage formed therein, and fluidly isolated from the chamber volume, the base having an inlet and an outlet adapted to circulate a fluid through the passage, as recited by independent claim 11 as amended.

Thus, claim 11, and claim 13 that depends therefrom, are patentable over *Masuda*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

2. Claims 39-43

Claims 39-43 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Masuda*. In response, the Applicants have amended independent claim 38, from which claims 39-43 depend, to more clearly recite aspects of the invention.

*Masuda* has been discussed above. *Masuda* does not teach, show or suggest all of the limitations of independent claim 38. Specifically, *Masuda* does not teach, show or suggest a liner having an outer cylindrical wall configured to

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line the sidewalls of a chamber, an inner cylindrical wall configured to line a substrate support disposed in the process volume of the chamber, a bottom coupled between the outer and inner cylindrical walls, and a passage at least partially formed in the liner and isolated from the process volume, as recited by independent claim 38 as amended.

Thus, claim 38, and claims 39-43 that depend therefrom, are patentable over *Masuda*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

D. 35 U.S.C. §103(a)

Claims 21-24 and 49-50

*Masuda* in view of *Shan et al.*

1. Claims 21-24

Claims 21-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Masuda* in view of European Patent No. EP 0 814 495, published December 29, 1997 to *Shan et al.* (hereinafter referred to as "*Shan*"). In response, the Applicants have amended independent claim 11, from which claims 21-24 depend, to more clearly recite aspects of the invention.

*Masuda* and *Shan* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 11. *Masuda* has been discussed above. *Shan* teaches a plasma processing chamber having a generally cylindrical dielectric cathode shield that extends from a chamber lid and has an annular protrusion which functions as half of an exhaust baffle. A dielectric anode shield is spaced radially inward from the cathode shield and includes a similar annular protrusion that overlaps the protrusion on the cathode shield to form the second half of the baffle. Channels in the sidewalls of the chamber are pumped with cool water to control the temperature of the walls. A lid of the chamber has a gas inlet manifold coupled to one or more lines from a gas source, and a gas distribution plate positioned below the manifold to release the process gases into the chamber interior. The cathode shield further includes an arcuate aperture connected to an exhaust port to allow gases to exit the

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chamber. *Masuda* and *Shan* do not, individually or in combination, teach, show or suggest a chamber liner having a base substantially covering the bottom of the chamber body, the base having a substantially annular passage formed therein, and fluidly isolated from the chamber volume, the base having an inlet and an outlet adapted to circulate a fluid through the passage, as recited by independent claim 11 as amended.

Thus, claim 11, and claims 21-24 that depend therefrom, are patentable over *Masuda* in view of *Shan*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

**2. Claims 49-50**

Claims 49-50 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Masuda* in view of *Shan*. In response, the Applicants have amended independent claim 47, from which claims 49-50 depend, to more clearly recite aspects of the invention.

*Masuda* and *Shan* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 47. *Masuda* and *Shan* have been discussed above. *Masuda* and *Shan* do not, individually or in combination, teach, show or suggest a chamber liner having at least a first portion having a base substantially covering a bottom of a chamber body and an outer wall disposed proximate a wall of the chamber body, the chamber liner having a passage fluidly isolated from the chamber volume at least partially formed in the chamber liner, as recited by independent claim 47 as amended.

Thus, independent claim 47, and claims 49-50 that depend therefrom, are patentable over *Masuda* in view of *Shan*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

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**E. 35 U.S.C. §103(a)**

**Claims 11-15, 38-41, 43-48 and 51**

***Pu et al. in view of Masuda***

**1. Claims 11-15**

Claims 11-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over PCT Application No. WO 99/48130, issued on August 14 2001 as United States Patent No. 6,273,022 to *Pu et al.* (hereinafter referred to as "*Pu*") in view of *Masuda*. In response, the Applicants have amended independent claim 11, from which claims 12-15 depend, to more clearly recite aspects of the invention.

*Pu* and *Masuda* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 11. *Masuda* has been discussed above. *Pu* teaches a plasma process chamber having inner and outer liners disposed parallel to chamber side walls. The inner and outer liners are spaced apart relative to each other, and each has a lateral extension. The lateral extensions on the inner and outer liners overlap to form an exhaust baffle. *Pu* and *Masuda* do not, individually or in combination, teach, show or suggest a chamber liner having a base substantially covering the bottom of the chamber body, the base having a substantially annular passage formed therein, and fluidly isolated from the chamber volume, the base having an inlet and an outlet adapted to circulate a fluid through the passage, as recited by independent claim 11 as amended.

Thus, independent claim 11, and claims 12-15 that depend therefrom, are patentable over *Pu* in view of *Masuda*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

**2. Claims 38-41 and 43-46**

Claims 38-41 and 43-46 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Masuda*. In response, the Applicants have amended independent claim 38, from which claims 39-41 and 43-46 depend, to more clearly recite aspects of the invention.

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*Pu* and *Masuda* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 38. *Pu* and *Masuda* have been discussed above. *Pu* and *Masuda* do not, individually or in combination, teach, show or suggest a liner having an outer cylindrical wall configured to line the sidewalls of a chamber, an inner cylindrical wall configured to line a substrate support disposed in the process volume of the chamber, a bottom coupled between the outer and inner cylindrical walls, and a passage at least partially formed in the liner and isolated from the process volume, as recited by independent claim 38 as amended.

Thus, independent claim 38, and claims 39-41 and 43-46 that depend therefrom, are patentable over *Pu* in view of *Masuda*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

**3. Claims 47 and 48**

Claims 47 and 48 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Masuda*. In response, the Applicants have amended independent claim 47, from which claim 48 depends, to more clearly recite aspects of the invention.

*Pu* and *Masuda* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 47. *Pu* and *Masuda* have been discussed above. *Pu* and *Masuda* do not, individually or in combination, teach, show or suggest a chamber liner having at least a first portion having a base substantially covering a bottom of a chamber body and an outer wall disposed proximate a wall of the chamber body, the chamber liner having a passage fluidly isolated from the chamber volume at least partially formed in the chamber liner, as recited by independent claim 47 as amended.

Thus, independent claim 47, and claim 48 that depends therefrom, are patentable over *Pu* in view of *Masuda*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

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4. **Claim 51**

Claim 51 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Masuda*. In response, the Applicants have amended independent claim 51 to more clearly recite aspects of the invention.

*Pu* and *Masuda* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 51. *Pu* and *Masuda* have been discussed above. *Pu* and *Masuda* do not, individually or in combination, teach, show or suggest a chamber liner disposed against a vertical portion of a substrate support, the chamber liner having a passage at least partially formed in the chamber liner, as recited by independent claim 51 as amended.

Thus, independent claim 51 is patentable over *Pu* in view of *Masuda*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

F. **35 U.S.C. §103(a)**

**Claims 21-24 and 49-50**

***Pu et al.* in view of *Masuda* and further in view of *Shan***

1. **Claims 21-24**

Claims 21-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Masuda* and further in view of *Shan*. In response, the Applicants have amended independent claim 11, from which claims 21-24 depend, to more clearly recite aspects of the invention.

*Pu*, *Masuda* and *Shan* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 11. *Pu*, *Masuda* and *Shan* have been discussed above. The combination of *Pu*, *Masuda* and *Shan* teaches a plasma processing chamber having one or more chamber liners disposed therein, wherein at least one of the liners is coupled through a sidewall to a pipe or line that supplies a heat exchanging medium to control the surface temperature of the liner and wherein the sidewalls themselves include channels for pumping cool water to control the temperature of the walls. *Pu*, *Masuda* and *Shan* do not, individually or in combination, teach, show or suggest a chamber

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liner having a base substantially covering the bottom of the chamber body, the base having a substantially annular passage formed therein, and fluidly isolated from the chamber volume, the base having an inlet and an outlet adapted to circulate a fluid through the passage, as recited by independent claim 11 as amended.

Thus, independent claim 11, and claims 21-24 that depend therefrom, are patentable over *Pu* in view of *Masuda* and further in view of *Shan*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

**2. Claims 49-50**

Claims 49-50 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Masuda* and further in view of *Shan*. In response, the Applicants have amended independent claim 47, from which claims 49-50 depend, to more clearly recite aspects of the invention.

*Pu*, *Masuda* and *Shan* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 47. *Pu*, *Masuda* and *Shan* have been discussed above. *Pu*, *Masuda* and *Shan* do not, individually or in combination, teach, show or suggest a chamber liner having at least a first portion having a base substantially covering a bottom of a chamber body and an outer wall disposed proximate a wall of the chamber body, the chamber liner having a passage fluidly isolated from the chamber volume at least partially formed in the chamber liner, as recited by independent claim 47 as amended.

Thus, independent claim 47, and claims 49-50 that depend therefrom, are patentable over *Pu* in view of *Masuda* and further in view of *Shan*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

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**G. 35 U.S.C. §103(a)**

**Claim 42**

***Pu et al. in view of Masuda and further in view of Collins et al.***

Claim 42 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Masuda* and further in view of PCT Patent Application No. WO 97/08734, published March 6, 1997 to *Collins et al.* (hereinafter referred to as "*Collins*"). In response, the Applicants have amended independent claim 38, from which claim 42 depends, to more clearly recite aspects of the invention.

*Pu*, *Masuda* and *Collins* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 38. *Pu* and *Masuda* have been discussed above. *Collins* teaches a plasma processing chamber optionally including a cold liner that covers the interior surfaces of a pumping annulus positioned near the bottom of the chamber. The liner is a solid component, having no channels or passages formed therein except for a connection to a pump. The liner is thermally coupled to a cold sink that maintains the temperature of the liner below a polymer condensation temperature so that polymer precursor materials in the chamber deposit on the liner. The combination of *Pu*, *Masuda* and *Collins* does not teach, show or suggest a passage at least partially formed in a liner, the passage adapted to flow a heat transfer medium therethrough, as recited by independent claim 38 as amended.

Thus, independent claim 38, and claim 42 that depends therefrom, are patentable over *Pu* in view of *Masuda* and further in view of *Collins*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

**H. 35 U.S.C. §103(a)**

**Claims 11-15, 21-24, 38-41 and 43-51**

***Shan* in view of *Masuda***

**1. Claims 11-15 and 21-24**

Claims 11-15 and 21-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda*. In response, the Applicants have

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amended independent claim 11, from which claims 12-15 and 21-24 depend, to more clearly recite aspects of the invention.

*Shan* and *Masuda* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 11. *Shan* and *Masuda* have been discussed above. *Shan* and *Masuda* do not teach, show or suggest a chamber liner having a base substantially covering the bottom of the chamber body, the base having a substantially annular passage formed therein, and fluidly isolated from the chamber volume, the base having an inlet and an outlet adapted to circulate a fluid through the passage, as recited by independent claim 11 as amended.

Thus, independent claim 11, and claims 12-15 and 21-24 that depend therefrom, are patentable over *Shan* in view of *Masuda*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

**2. Claims 38-41 and 43-46**

Claims 38-41 and 43-46 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda*. In response, the Applicants have amended independent claim 38 to more clearly recite aspects of the invention. Specifically, claim 38 has been amended to incorporate the limitations of claims 39, 41 and 43-46, which have been cancelled.

*Shan* and *Masuda* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 38. *Shan* and *Masuda* have been discussed above. *Shan* and *Masuda* do not teach, show or suggest a liner having an outer cylindrical wall configured to line the sidewalls of a chamber, an inner cylindrical wall configured to line a substrate support disposed in the process volume of the chamber, a bottom coupled between the outer and inner cylindrical walls, and a passage at least partially formed in the liner and isolated from the process volume, as recited by independent claim 38 as amended.

Thus, independent claim 38, and claim 40 that depends therefrom, are patentable over *Shan* in view of *Masuda*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

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3. Claims 47-50

Claims 47-50 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda*. In response, the Applicants have amended independent claim 47, from which claims 48-50 depend, to more clearly recite aspects of the invention.

*Shan* and *Masuda* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 47. *Shan* and *Masuda* have been discussed above. *Shan* and *Masuda* do not teach, show or suggest a chamber liner having at least a first portion having a base substantially covering a bottom of a chamber body and an outer wall disposed proximate a wall of the chamber body, the chamber liner having a passage fluidly isolated from the chamber volume at least partially formed in the chamber liner, as recited by independent claim 47 as amended.

Thus, independent claim 47, and claims 48-50 that depend therefrom, are patentable over *Shan* in view of *Masuda*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

4. Claim 51

Claim 51 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda*. In response, the Applicants have amended claim 51 to more clearly recite aspects of the invention.

*Shan* and *Masuda* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 51. *Shan* and *Masuda* have been discussed above. *Shan* and *Masuda* do not teach, show or suggest a chamber liner disposed against a vertical portion of a substrate support, the chamber liner having a passage at least partially formed in the chamber liner, as recited by independent claim 51 as amended.

Thus, independent claim 51 is patentable over *Shan* in view of *Masuda*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

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I. 35 U.S.C. §103(a)

Claims 26 and 28

*Shan* in view of *Zhao et al.*

Claims 26 and 28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of European Patent Application No. EP 0 855 735, published July 29, 1998 to *Zhao et al.* (hereinafter referred to as "*Zhao*"). In response, the Applicants have amended claim 26, from which claim 28 depends, to more clearly recite aspects of the invention.

*Shan* and *Zhao* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 26. As discussed above, *Shan* teaches a plasma processing chamber having two dielectric shields or liners, a first being disposed adjacent a chamber side wall and a second being disposed radially inward of the first, adjacent a cathode or substrate support. *Shan* does not teach, as the Examiner suggests, a liner having a plurality of apertures formed at least partially therein; rather, *Shan* teaches that one aperture or slit is formed through the chamber side wall and adjacent liner to create a transfer port for a substrate. *Zhao* teaches a chemical vapor deposition chamber having a substrate pedestal, two liners, and a showerhead that has a plurality of nozzles for distributing a flow of processing gas over a substrate positioned on the pedestal. *Shan* and *Zhao* do not teach, show or suggest a liner disposed proximate a chamber lid, the liner having a first portion having a base substantially covering a bottom of a chamber body and an outer wall disposed proximate a wall of the chamber body, a second portion disposed proximate a lid of the chamber body and having a second portion wall extending downward along the wall of the chamber body to the outer wall of the first portion of the liner, and a plurality of apertures formed in the second portion of the liner, as recited by independent claim 26 as amended.

Thus, independent claim 26, and claim 28 that depends therefrom, are patentable over *Shan* in view of *Zhao*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

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J. 35 U.S.C. §103(a)

Claim 27

*Shan* in view of *Zhao* and further in view of *Takeuchi et al.*

Claim 27 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Zhao*, and further in view of United States Patent No. 5,824,158, issued October 20, 1998 to *Takeuchi et al.* (hereinafter referred to as "*Takeuchi*"). In response, the Applicants have amended independent claim 26, from which claim 27 depends, to more clearly recite aspects of the invention.

*Shan*, *Zhao* and *Takeuchi* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 26. *Shan* and *Zhao* have been discussed above. *Takeuchi* teaches a plasma processing system in which a gas inlet nozzle comprised of quartz extends through a chamber side wall. *Shan*, *Zhao* and *Takeuchi* do not teach, show or suggest a liner disposed proximate a chamber lid, the liner having a first portion having a base substantially covering a bottom of a chamber body and an outer wall disposed proximate a wall of the chamber body, a second portion disposed proximate a lid of the chamber body and having a second portion wall extending downward along the wall of the chamber body to the outer wall of the first portion of the liner, and a plurality of apertures formed in the second portion of the liner, as recited by independent claim 26 as amended.

Thus, independent claim 26, and claim 27 that depends therefrom, are patentable over *Shan* in view of *Zhao* and further in view of *Takeuchi*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

K. 35 U.S.C. §103(a)

Claim 37

*Shan* in view of *Zhao* and further in view of *Banholzer et al.*

Claim 37 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Zhao*, and further in view of United States Patent No.

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5,565,058, issued October 15, 1996 to *Banholzer et al.* (hereinafter referred to as "*Banholzer*"). In response, the Applicants have amended independent claim 26, from which claim 37 depends, to more clearly recite aspects of the invention.

*Shan, Zhao* and *Banholzer* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 26. *Shan* and *Zhao* have been discussed above. *Banholzer* teaches a vacuum chamber in which shield positioned with the chamber is treated to roughen its surface to increase the adhesion of deposited materials. *Shan, Zhao* and *Banholzer* do not teach, show or a liner disposed proximate a chamber lid, the liner having a first portion having a base substantially covering a bottom of a chamber body and an outer wall disposed proximate a wall of the chamber body, a second portion disposed proximate a lid of the chamber body and having a second portion wall extending downward along the wall of the chamber body to the outer wall of the first portion of the liner, and a plurality of apertures formed in the second portion of the liner, as recited by independent claim 26 as amended.

Thus, independent claim 26, and claim 37 that depends therefrom, are patentable over *Shan* in view of *Zhao* and further in view of *Takeuchi*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

L. 35 U.S.C. §103(a)

Claim 42

*Shan* in view of *Masuda* and further in view of *Collins*

Claim 42 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda*, and further in view of *Collins*. In response, the Applicants have amended independent claim 38, from which claim 42 depends, to more clearly recite aspects of the invention.

*Shan, Masuda* and *Collins* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 38. *Shan, Masuda* and *Collins* have been discussed above. The combination of *Shan, Masuda* and *Collins* does not teach, show or suggest a liner having an outer cylindrical wall

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configured to line the sidewalls of a chamber, an inner cylindrical wall configured to line a substrate support disposed in the process volume of the chamber, a bottom coupled between the outer and inner cylindrical walls, and a passage at least partially formed in the liner and isolated from the process volume, as recited by independent claim 38 as amended.

Thus, independent claim 38, and claim 42 that depends therefrom, are patentable over *Shan* in view of *Masuda* and further in view of *Collins*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

M. 35 U.S.C. §103(a)

Claim 52

*Shan* in view of *Masuda* and further in view of *Zhao*

Claim 52 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda*, and further in view of *Zhao*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

*Shan*, *Masuda* and *Zhao* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 52. *Shan*, *Masuda* and *Zhao* have been discussed above. As discussed above, *Shan* teaches a plasma processing chamber having two dielectric shields or liners, a first being disposed adjacent a chamber side wall and a second being disposed radially inward of the first, adjacent a cathode or substrate support. *Shan* does not teach, as the Examiner suggests, a liner having a plurality of apertures formed at least partially therein; rather, *Shan* teaches that one aperture or slit is formed through the chamber sidewall and adjacent liner to create a transfer port for a substrate. The combination of *Shan*, *Masuda* and *Zhao* does not teach, show or suggest a cylindrical wall having an upper end closed by a top member, the cylindrical wall adapted to line a portion of the chamber volume, a plurality of apertures in the top member, a passage formed in the top member and fluidly isolated from the chamber volume, and a nozzle disposed in at least one of the apertures, as recited by independent claim 52 as amended.

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Thus, independent claim 52 is patentable over *Shan* in view of *Masuda* and further in view of *Zhao*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.


### CONCLUSION

The Applicants submit that all claims now pending are in condition for allowance. Accordingly, both reconsideration of this application and swift passage to issue are earnestly solicited.

If the Examiner believes that any unresolved issues still exist, it is requested that the Examiner telephone Keith Taboada at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

July 22, 2003

  
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I hereby certify that this correspondence is being transmitted by facsimile under 37 C.F.R. §1.8 on July 22, 2003 and is addressed to Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, Facsimile No: (703) 872-9310.

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